

## **REMARKS**

### **Claims**

Fifteen (15) claims are pending in the application. Of the pending claims, five (5) claims are independent.

### **Claim Rejections under 35 U.S.C. § 103**

#### **1. Rejection of Claims 59-60 under 35 U.S.C. § 103(a)**

The Examiner rejected claims 59-60 under 35 U.S.C. § 103(a) as being unpatentable over Blidschun et al. (US Pat. No. 4,680,163) and Bayliss et al. ("The Combined Effect of Hydrogen Peroxide and Ultraviolet Irradiation on Bacterial Spores").

The Applicant respectfully traverses the rejection of claims 59 and 60 under 35 U.S.C. § 103(a) as unpatentable over Blidschun and Bayliss because the Examiner has not established a *prima facie* case of obviousness as required under 35 U.S.C. § 103(a).

It is respectfully submitted that the Examiner has not established that Blidschun teaches "spraying". In particular, Blidschun teaches that dropping ultrasonically agitated mist (Col. 4, line 29) is sent up a chimney (Col. 4, line 45) and then electrically charged. These droplets are then "discharged from the end of conduit 11 and will be forced to flow upwardly through the gap between electrode 12 and the inside wall of container 15.

The electric field which is established between electrodes 12 and 13 will cause the droplets to move outwardly and thus be deposited on the inside surfaces of the

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container 15." Col. 5, lines 17-23. As described by Blidschun above, it is clear that the droplets are caused to be applied by electromagnetic forces, and not by spraying. Moreover, the Blidschun reference teaches away from spraying by indicating that spraying with large droplets does not result in the wetting of the entire surface. Col. 1, line 67 through col. 2, line 2.

Further, Blidschun teaches away from droplets greater than 50  $\mu\text{m}$  in diameter as amended. See col. 2, line 2.

**Claim 61 and 73:**

The Examiner rejected claim 61 and 73 under 35 U.S.C. § 103(a) as being unpatentable over Kodera (U.S. Pat. No. 4,366,125) ("Kodera") in view of Wiesmann et al. (U.S. Pat. No. 4,751,392) ("Weismann").

The Applicant respectfully traverses the rejection of claims 61 and 73 under 35 U.S.C. § 103(a) as unpatentable over Kodera because the Examiner has not established a *prima facie* case of obviousness as required under 35 U.S.C. § 103(a).

"To establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), each of three requirements must be met. First, the references, taken alone or in combination, must teach or suggest each and every element recited in the claims. See M.P.E.P. § 2143.03 (8th ed. 2001). Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references in a manner resulting in the claimed invention. Third, a reasonable expectation of success must exist. Moreover, each of these requirements must "be found in the prior art, and not be based on applicant's disclosure."

M.P.E.P. § 2143 (8th ed. 2001).

On page 3, the examiner states that, according to Kodera, "The hydrogen peroxide is supplied through a heating element to the reservoir." However, while a "heating element" is mentioned it is used to heat the air around the photosensitizer and not the photosensitizer itself. Further, the Kodera patent specifically states that the photosensitizer mist is kept at room temperature (see Col. 3, line 61) thus teaching away from the heating of the photosensitizer.

Secondly, as the examiner points out, Kodera is silent regarding the use of waste heat from the light source to heat the photosensitizer. This deficiency is not negated by Weismann as that reference merely acknowledges the need to cool the lamp and suggests a method for doing so. There is no mention of capturing the waste heat or utilizing it.

Finally, the Examiner cannot establish that some suggestion or motivation exists, either in Kodera or Weismann, or in the knowledge generally available to one of ordinary skill in the art, to combine or modify the references in the manner suggested.

For at least the reasons stated above, the Applicant submits that Kodera and Weismann do not teach or suggest all the elements of the Applicant's claims 61 and 73. Thus, the rejection of these claims under 35 U.S.C. S 103(a) should be withdrawn and the claims allowed.

**Claims 67 and 68:**

The Examiner rejected claims 67 and 68 under 35 U.S.C. § 103(a) as being unpatentable over Kodera.

While the Applicant disagrees with the merits of the rejection, in order to advance the prosecution of this application, the Applicant has amended independent claim 67. Kodera discloses the use of "Shield Plates" only at the "joints between the housings of adjacent devises". (See Kodera, col. 5, lines 16-17.) Kodera does not disclose or teach a barrier "that defines the treatment space". Further, the examiner has mischaracterized Kodera as "providing a portable barrier ... surround[ing] the contaminated object".

Accordingly, the Applicant respectfully submits that this ground for rejection should be withdrawn as moot. No new matter has been added. The Applicant further submits that the proposed amendment does not require additional consideration or search beyond that already performed by the Examiner, and thus should be entered by the Examiner.

**Claims 62-66, 70, and 73:**

The Examiner rejected claims 62-66, 70 and 73 under 35 U.S.C. § 103(a) as being unpatentable over Blidschun in view of Kodera. and Wilkie (U.S. 5,238,709).

The Applicant respectfully traverses the rejection of claims 62-66, 70 and 73 under 35 U.S.C. § 103(a) as unpatentable over Blidschun in view of Kodera and Wilkie

because the Examiner has not established a *prima facie* case of obviousness as required under 35 U.S.C. § 103(a).

"To establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), each of three requirements must be met. First, the references, taken alone or in combination, must teach or suggest each and every element recited in the claims. See M.P.E.P. § 2143.03 (8th ed. 2001). Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references in a manner resulting in the claimed invention. Third, a reasonable expectation of success must exist. Moreover, each of these requirements must "be found in the prior art, and not be based on applicant's disclosure."

M.P.E.P. § 2143 (8th ed. 2001).

As pointed out by the examiner, Blidschun is silent with regard to a portable barrier. This deficiency overcome by Kodera or Wilkie. The examiner has characterized the Kodera patent as "providing a portable barrier...surround the contaminated object". However, Kodera discloses the use of "Shield Plates" only at the "joints between the housings of adjacent devises". (See Kodera, col. 5, lines 16-17.) Kodera does not disclose or teach a barrier, portable or otherwise. Thus, there is no teaching or suggestion of "each and every element recited in the claims" in question as required.

Further, the Examiner cannot establish that some suggestion or motivation exists, either in Blidschun or Kodera or Wilkie, or in the knowledge generally available to one of ordinary skill in the art, to combine or modify the references in the manner suggested.

Further, Blidschun does not teach the element of "spraying" as discussed above, and teaches away from the droplet size of "greater than 50  $\mu\text{m}$  in diameter" as claimed.

For at least the reasons stated above, the Applicant submits that Kodera and Weismann do not teach or suggest all the elements of the Applicant's claims 61 and 73. Thus, the rejection of these claims under 35 U.S.C. S 103(a) should be withdrawn and the claims allowed.

**Claim 71:**

The Examiner rejected claim 71 under 35 U.S.C. § 103(a) as being unpatentable over Blidschun, Kodera and Wilkie as applied to claim 62 above, and further in view of Wiesmann.

The Applicant respectfully traverses the rejection of claim 71 under 35 U.S.C. § 103(a) as unpatentable over Blidschun, Kodera and Wilkie and further in view of Wiesmann because the Examiner has not established a *prima facie* case of obviousness as required under 35 U.S.C. § 103(a).

"To establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), each of three requirements must be met. First, the references, taken alone or in combination, must teach or suggest each and every element recited in the claims. See M.P.E.P. § 2143.03 (8th ed. 2001).

As previously discussed with regard to claims Kodera is silent regarding the use of waste heat from the light source to heat the photosensitizer. This deficiency is not negated by Weismann as that reference merely acknowledges the need to cool the lamp and suggests a method for doing so. There is no mention of capturing the waste heat or utilizing it.

In addition, Blidschun does not teach "spraying" as discussed previously.

### ***Conclusion***

For at least the reasons discussed above, the Applicant respectfully submits that all of the claims are allowable over the prior art of record. Further, the Applicant submits that the entry of the amendment would place the application in better form for appeal, should the Examiner dispute the patentability of the pending claims.

In view of the foregoing remarks, the Applicant submits that this claimed invention, as amended, is neither anticipated nor rendered obvious in view of the prior art references cited against this application. The Applicant therefore requests the entry of this Amendment, the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims. All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Inventor: Golden  
Attorney Docket No. 42173-018  
S/N 10/750,048

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

/Grant D. Kang/

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